

Cellular Immunology

AN INTERNATIONAL JOURNAL

EDITOR-IN-CHIEF: H. Sherwood Lawrence

Volume 148, 1993



ACADEMIC PRESS, INC.

Harcourt Brace & Company

San Diego New York Boston
London Sydney Tokyo Toronto

Copyright © 1993 by Academic Press, Inc.
All Rights Reserved

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the copyright owner.

The appearance of the code at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (27 Congress Street, Salem, Massachusetts 01970), for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Copy fees for pre-1993 articles are as shown on the article title pages; if no fee code appears on the title page, the copy fee is the same as for current articles.

0008-8749/93 \$5.00

MADE IN THE UNITED STATES OF AMERICA

This journal is printed on acid-free paper.



Contents of Volume 148

NUMBER 1, APRIL 15, 1993

PATRICIA MÉNDEZ-SAMPERIO. Antigen Presentation of Mycobacterial Peptides to Human T Cell Clones Can Be Immunomodulated by Adding an MHC-Specific Inhibitor	1
YOSHIYA KATSURA, SUMIAKI TSURU, MASAYUKI NORITAKE, SHINSUKE KAYASHIMA, HIROYUKI WAKIYAMA, NARIYOSHI SHINOMIYA, MIHO SHINOMIYA, AND MAKOTO ROKUTANDA. Granulocyte Colony-Stimulating Factor Enhances the Extracellular Emission of Reactive Oxygen from Neutrophils Stimulated with Formylmethionylleucylphenylalanine	10
THIERRY PEDRON, ROBERT GIRARD, AGNÈS LASFARGUES, AND RICHARD CHABY. Differential Effects of a Monoclonal Antibody Recognizing 3-Deoxy-D-manno-2-octulosonic Acid on Endotoxin-Induced Activation of Pre-B Cells and Macrophages	18
ROBERTO GERLI, ELISABETTA AGEA, CHRISTOPHER MUSCAT, RITA TOGNELLINI, GIULIANA FIORUCCI, FABRIZIO SPINOZZI, CRISTINA CERNETTI, AND ALBERTO BERTOTTO. Activation of Cord T Lymphocytes. III. Role of LFA-1/ICAM-1 and CD2/LFA-3 Adhesion Molecules in CD3-Induced Proliferative Response	32
SAO-TAH FAN, ADRIENNE A. BRIAN, BRIDGET A. LOLLO, NIGEL MACKMAN, NANCY L. SHEN, AND THOMAS S. EDGINGTON. CD11a/CD18 (LFA-1) Integrin Engagement Enhances Biosynthesis of Early Cytokines by Activated T Cells	48
S. LOMBARD-PLATET, P. BERTOLINO, C. GIMENEZ, M. HUMBERT, D. GERLIER, AND C. RABOURDIN-COMBE. Invariant Chain Expression Similarly Controls Presentation of Endogenously Synthesized and Exogenous Antigens by MHC Class II Molecules	60
ELISABETH HÖRNQVIST, LENNART ENERBÄCK, XIAO-JUN CHEN, AND NILS LYCKE. A Novel Large Granular Lymphocyte-like Cell Isolated from IL-2-Supplemented Murine Intestinal Lamina Propria Lymphocyte Cultures with Potent Inhibitory Action on Lymphocyte Proliferation ..	71
YOSHIHISA OGATA, MIKIO KIMURA, KAORU SHIMADA, TOMO WAKABAYASHI, HARUO ONODA, TAKUYA KATAGIRI, AND AKIO MATSUZAWA. Distinctive Expression of <i>lpr^g</i> in the Heterozygous State on Different Genetic Backgrounds	91
DULCEAYDEE GIGLIOTTI, EVA LOTTA NIHLMARK, HANS WIGZELL, AND MONA HANSSON. Murine Thymocytes with Ability to Inhibit IL-2 Production. II. Characterization of a Subpopulation with Regulatory Function in the Thymus	103
YONA KALECHMAN, SHOSHANA HERMAN, UZI GAFTER, AND BENJAMIN SREDNI. Enhancing Effects of Autologous Erythrocytes on Human or Mouse Cytokine Secretion and IL-2R Expression ..	114
ANIL BAJPAI AND ZACHARIE BRAHMI. Regulation of Resting and IL-2-Activated Human Cytotoxic Lymphocytes by Exogenous Nucleotides: Role of IL-2 and Ecto-ATPases	130
NITIN K. DAMLE, KERRY KLUSSMAN, GINA LEYTZE, HANS D. OCHS, ALEJANDRO ARUFFO, PETER S. LINSLEY, AND JEFFREY A. LEDBETTER. Costimulation via Vascular Cell Adhesion Molecule-1 Induces in T Cells Increased Responsiveness to the CD28 Counter-receptor B7	144
JERRY P. WEIR AND MONTE S. MELTZER. Transfection of Human Immunodeficiency Virus Type 1 Proviral DNA into Primary Human Monocytes	157
V. KARANIKAS, I. R. MACKAY, M. J. ROWLEY, AND B. E. LOVELAND. Autoreactive MHC-Restricted Cytotoxic Cells in BALB/c Mice after Novel Immunisation with a Conserved Mammalian Autoantigen	166
G. F. LAURITZSEN AND B. BOGEN. The Role of Idiotype-Specific, CD4 ⁺ T Cells in Tumor Resistance against Major Histocompatibility Complex Class II Molecule Negative Plasmacytoma Cells ..	177
MITSUNOBU MATSUMOTO, HIDEKI YAGI, KIKUKO KUNIMOTO, JUNKO KAWAGUCHI, SUSUMU MAKINO, AND MINORU HARADA. Transfer of Autoimmune Diabetes from Diabetic NOD Mice to NOD Athymic Nude Mice: The Roles of T Cell Subsets in the Pathogenesis	189
SANTHANAKRISHNAN SUNIL, KOTARO ETO, VIJAY K. SINGH, AND TOSHIMICHI SHINOHARA. Oligopeptides of Three to Five Residues Derived from Uveitopathogenic Sites of Retinal S-Antigen Induce Experimental Autoimmune Uveitis (EAU) in Lewis Rats	198
SHORT COMMUNICATIONS	
LILIANA JASO-FRIEDMANN, JOHN H. LEARY III, AND DONALD L. EVANS. Nonspecific Cytotoxic Cells in Fish: Antigenic Cross-Reactivity of a Function Associated Molecule with the Intermediate Filament Vimentin	208

THOMAS WELGE, MICHAEL WOLF, CARLOTA JÄGGLE, AND GERD-ALBRECHT LUCKENBACH. Human Naive T Cells Are Preferentially Stimulated by Crosslinking of CD3 and CD45RA with Monoclonal Antibodies	218
K. SIOBHAN BARONE, PATRICIA C. M. O'BRIEN, AND JOHN R. STEVENSON. Characterization and Mechanisms of Thymic Atrophy in Protein-Malnourished Mice: Role of Corticosterone	226
SEBASTIAN WESSELBORG AND DIETER KABELITZ. Activation-Driven Death of Human T Cell Clones: Time Course Kinetics of the Induction of Cell Shrinkage, DNA Fragmentation, and Cell Death	234
ANNOUNCEMENTS	242
PAPERS TO APPEAR IN FORTHCOMING ISSUES	243

NUMBER 2, MAY 1993

M. G. CIFONE, D. BOTTI, C. FESTUCCIA, T. NAPOLITANO, E. DEL GROSSO, G. CAVALLO, M. A. CHESSE, AND A. SANTONI. Involvement of Phospholipase A ₂ Activation and Arachidonic Acid Metabolism in the Cytotoxic Functions of Rat NK Cells	247
BALAJI BALASA AND GEORGE CARAYANNIOTIS. Induction of Experimental Autoimmune Thyroiditis in Rats with the Synthetic Peptide (2495-2511) of Thyroglobulin	259
LORISE C. GAHRING, DAVID N. ERNST, CAROLE G. ROMBALL, MARILYN L. THOMAN, BRUCE E. TORBETT, MONTE HOBBS, AND WILLIAM O. WEIGLE. The Expression of CD45RB on Antigen- Responsive CD4 ⁺ Lymphocytes: Mouse Strain Polymorphism and Different Responses to Distinct Antigens	269
PASCAL LAUNOIS, PAUL VANDENBUSSCHE, N'DIAYE NIANG M'BAYAME, ANNIE DROWART, JEAN- PAUL VAN VOOREN, JEAN-LOUIS SARTHOU, JACQUES MILLAN, AND KRIS HUYGEN. IL-6 Pro- duction in Response to Purified Mycobacterial Heat-Shock Proteins and to Antigen 85 in Leprosy	283
WEIPING WANG AND MARK BALLOU. The Effects of Retinoic Acid on <i>in Vitro</i> Immunoglobulin Synthesis by Cord Blood and Adult Peripheral Blood Mononuclear Cells	291
DEBORAH PHILP, MARK PEZZANO, YANG LI, CORAL OMENE, WILLIAM BOTO, AND JERRY GUYDEN. The Binding, Internalization, and Release of Thymocytes by Thymic Nurse Cells	301
JOSÉPHINE M. BRAUN, SANDRINE MARION, JEANNINE CHARREIRE, AND ARMELLE ROPARS. Pro- duction of Ab2 β , Anti-idiotypic Monoclonal Antibodies, Specific for Human Thyrotropin Re- ceptor	316
DOMINIQUE VELIN, PHILIPPE GOETTELINGER, SYLVIE FROIDEVAUX, AND FRANCIS LOOR. <i>gld</i> and <i>lpr</i> Hematopoietic Cell Transfers: Common and Different Serological Features of the C57BL/6 Chimeras	331
LILLIAN MAGGIO-PRICE, ANGELIKA GROSSMANN, FAITH SHIOTA, AND DAVID ENGEL. Increased Proliferative Capacity of CD4 ⁺ and CD8 ⁺ T Lymphocytes from Mutant sph ^{ha} /sph ^{ha} Mice Is Associated with Increased IL-2 Receptor Expression	346
RUDUAN WANG, SCOTT I. ABRAMS, DENNIS Y. LOH, CHYI-SONG HSIEH, KENNETH M. MURPHY, AND JOHN H. RUSSELL. Separation of CD4 ⁺ Functional Responses by Peptide Dose in Th1 and Th2 Subsets Expressing the Same Transgenic Antigen Receptor	357
HIROSHI ISHIDA, ROBIN HASTINGS, LUANN THOMPSON-SNIPES, AND MAUREEN HOWARD. Modified Immunological Status of Anti-IL-10 Treated Mice	371
TOSHIRO MAJIMA, YOSHIYUKI OHASHI, RYOICHI NAGATOMI, ATSUO IIZUKA, AND TASUKE KONNO. Defective Mononuclear Cell Antibody-Dependent Cellular Cytotoxicity (ADCC) in Patients with Leukocyte Adhesion Deficiency Emphasizing on Different CD11/CD18 Requirement of Fc γ R1 versus Fc γ R2 in ADCC	385
XIAOSUI JIANG AND CYNTHIA L. BALDWIN. Iron Augments Macrophage-Mediated Killing of <i>Brucella</i> <i>abortus</i> Alone and in Conjunction with Interferon- γ	397
MARY M. BARTIK, WILLIAM H. BROOKS, AND THOMAS L. ROSZMAN. Modulation of T Cell Pro- liferation by Stimulation of the β -Adrenergic Receptor: Lack of Correlation between Inhibition of T Cell Proliferation and cAMP Accumulation	408
MARIE T. JELONEK, JENNIFER L. BRUST, CHARLES H. SONG, GERTRUDIS B. CALANDRA, ALEXANDER MILLER, ELI E. SERCARZ, AND MARGARET A. KELLER. Maternal HEL Immunization Has No Lasting Effects on the Immune Response of Offspring to Immunization with Hen Egg-White Lysozyme	422

SHORT COMMUNICATIONS

FRANCESCA LEVI-SCHAFER AND MEIR SHALIT. Proliferation and Functional Responses of Bone Marrow-Derived Mast Cells after Activation	435
JAMES E. RIGGS. Igh-6b Expression in BALB. <i>nude</i> Mice	444
DEREK N. J. HART AND TIMOTHY C. R. PRICKETT. Intercellular Adhesion Molecule-2 (ICAM-2) Expression on Human Dendritic Cells	447
MARIA FIAMMETTA ROMANO, MARIA CATERINA TURCO, ANNA STANZIOLA, PATRIZIA CARANDENTE GIARRUSSO, ANTONELLO PETRELLA, PIERFRANCESCO TASSONE, RENÉ VAN LIER, SALVATORE VENUTA, AND SALVATORE FORMISANO. Defect of Interleukin-2 Production and T Cell Proliferation in Atopic Patients: Restoring Ability of the CD28-Mediated Activation Pathway	455
ANNOUNCEMENT	464
PAPERS TO APPEAR IN FORTHCOMING ISSUES	465
AUTHOR INDEX FOR VOLUME 148	469

NOTICE

The Subject Index for Volume 148 will appear in the December 1993 issue as part of a cumulative index for the year 1993.

